

NEW COLLEGE  
ENVIRONMENTAL STUDIES PROGRAM

Environmental studies in its broadest sense is a way of viewing the world rationally. Amongst the objectives in this field is an amalgam of ecological, economic, social and aesthetic goals. These goals represent a broad environmental viewpoint combining many disciplines and require that the individual be involved and effectively communicate with a variety of professional and non-professional groups. The individual entering this field should be 1) socially motivated; 2) able to work as part of a team; 3) understand that most projects are service oriented and 4) that clients and deadlines have to be honored. Even basic environmental research projects are generally service oriented.

Beginning in 1974-75, New College will offer a program in environmental studies, interdisciplinary and interdivisional. The Environmental Studies Program will offer students opportunities to evaluate and analyze past as well as contemporary and future environmental problems within the New College program. A basic aspect of the program will be the integration of academic and "real world" experiences in problem-solving situations.

Students may develop disciplinary knowledge and skills via courses and seminars in the three divisions - Natural Sciences, Social Sciences and Humanities - and then may apply their knowledge and skills in research projects dealing with practical problems in environmentally related areas. Students may choose either to develop their course work in one or a few disciplines or to explore many disciplines depending upon their individual orientation.

The following three facets of the College's Environmental Studies Program can contribute to the individual's education in this field:

I. A Seminar Program where people from local and state agencies and other organizations involved in environmental problems are the principle speakers. These programs will be supplemented with opportunities to attend local and state meetings on environmental issues.

II. Courses that relate to environmental problems and issues or provide important backgrounds for subsequent ESP projects. The following courses from the 1974-75 Course Syllabus indicate the breadth of these backgrounds.

Term I

\*Humanities and the Environment

\*Field Botany

Elementary Statistics for the Behavioral Sciences

Term II

Public Finance

The Science of Scarcity

\*The Political Culture of Urban America

Basic and Fortran

Creative Drawing

The Wall

Environmental Land-Use Planning Seminar

Term III

\*Environmental Biology

The Social Psychology of Attitudes and Attitude Change

Problems of Political Economy

Term III (continued)

\*American Naturalists and Environmental Ethics and Esthetics

Stained Glass Windows

Humanities and the Environment

Environmental Land-Use Planning Workshop or Laboratory

For the science oriented student there are the following:

Term I

\*Introductory Biology

\*Introductory Chemistry

\*Calculus I

Fundamentals of Physics

Term II

Organismic Biology

Genetics

Calculus I

Physics II

The starred courses are ones more suited for first year students.

III. Research Projects whose magnitude and duration may range from single term tutorials and ISPs to senior theses and NSF Student Originated Studies Grants on environmental problems. One of the major goals of these projects is that they would be community-service and resource oriented. A few examples follow:

- 1) Mangrove horticulture and tree nursery program
- 2) Design for the future development of Charlotte Beach State Park -  
An undeveloped State park.
- 3) Analysis of the structure and function of neighborhood associations.
- 4) Analysis of ground water and drainage basin systems.

- 5) Air pollution monitoring programs.
- 6) Attitudes of racial minorities toward "Environmental Protection"
- 7) The American aesthetic - the philosophy and psychology of waste.

Area of Concentration in Environmental Studies: General Guidelines

1. Procedure: At the time when a student chooses to declare Environmental Studies as his/her area of concentration, the student should:

- a) consult with one or more members of the faculty with a declared interest in Environmental Studies
- b) submit to his/her advisor and Chairman of the Committee on Environmental Studies in writing a brief statement of his/her goals in the field, a list of courses (including past courses plus future, projected courses where possible), and a statement concerning a possible senior project. (It is not assumed that the student will be able, at time of declaration, to give a detailed project description. However, as much detail as possible should be given, even if this is no more than a general area description such as "Environmental Chemistry," "Environmental Law," or "Environmental Ethics.")

Using this statement as a starting point, the student and the faculty member(s) in question will agree upon a program which is in keeping with the student's goals.

2. The following set of guidelines are to be viewed only as suggestions which might be helpful to students and faculty in designing individual programs. It is quite possible that students and faculty might agree on a program which ignores any one or more of these guidelines.

1) The program is intended to be interdisciplinary and interdivisional in nature. Therefore the student should take a substantial amount of course work in at least two divisions. When possible, some of the courses should allow the student to work on environmental issues within the course structure, such as an individual project relating the course material to some environmental question.

2) It is expected that the student will take between six and eight courses especially related to environmental studies, for example, the courses listed above.

3) The program is predicated on the assumption that students at graduation will have learned some basic research, practical and/or vocational skills. To accomplish this end, a student should:

a) take courses in various skills, such as: statistics, laboratory courses, etc.

b) plan, propose and execute at least one fieldwork project.

This might be the senior project, an off-campus study term, an Independent Study Project, or a fieldwork tutorial.

4) It is expected that the student will participate in the Environmental Studies Seminar Program. This will broaden the student's horizons, exposing him/her to non-academically oriented environmental concerns.

5) The student's Senior Project should be related in some way to the area of environmental studies.

The faculty whose interests are allied to the Environmental Studies Program include:

John Morrill	Biology
Peter Buri	Biology
Jane Stephens	Chemistry
Jan van der Veen	Economics
Robert Benedetti	Political Science
Natalie Rosel	Sociology
Tom Murray	Psychology
Jack Cartlidge	Fine Arts
Bryan Norton	Philosophy
Ronald Carson	Religion
Joe Cross	Mathematics
David Dykstra	English
Erik Rifkin	Student Chair Faculty (1974-75)

Financial Support for Student  
Projects in the Environmental Studies Program

In 1974 New College was awarded a special two-year grant from the Jessie Smith Noyes Foundation, Inc. for students participating in the College's Environmental Studies Program. The monies in this grant are to be used 1) to establish a revolving student loan fund, and 2) to provide for student aid for those in need of financial assistance to attend college.

In addition, the College has engaged in a one year CO-OP program with the Department of Pollution Control of Sarasota County. In this program two to four students will be engaged in and funded for research projects undertaken with the County.

The expenses of students working on projects within the Environmental Studies Program may also be supported in part by divisional allocations, restricted gifts to the E.S.P., grants and contracts from private and public groups, including city, county, state and federal programs.

## E.S.P. PROJECTS - POSSIBILITIES

- 1) County bicycle path system. Involves studying the laws and designs of bicycle paths, the developmental history of the county's bicycle path system, cost analyses, public vested interests, etc., and an objective evaluation of the program.
- 2) The impact of the federally subsidized flood insurance program on the evolution of local environmental and architectural designs on the coastal islands.
- 3) A manual-guide to beach and shoreline restoration and preservation through the use of native plants.
- 4) Cost sharing programs on shoreline erosion control and beach restoration with local case histories.
- 5) Utilization of boat license revenues for the improvement of boating public in public recreational areas.
- 6) An analysis of the socio-economic and political strategies associated with the development of a public park on South Lido Key.
- 7) The utilization of spoil islands for marine parks and as wildlife sanctuaries.
- 8) Ecological impact of emergent and submerged spoil islands on the surrounding submerged areas of the bay.
- 9) The ecology and hydrography of two small natural creek ecosystems.
- 10) Chemical analysis of heavy metal distribution in Sarasota County.
- 11) Chemical analysis of rain water as compared to storm sewer outfalls emptying into streams and bays.
- 12) B.O.D. and C.O.D. in different streams in Sarasota County
- 13) Historical synopsis of meteorological conditions in Sarasota County.
- 14) Development of an air monitoring station system for Sarasota County - a cost/benefit study.
- 15) An ecological and hydrographic analysis of dead-end canals.
- 16) The successional changes in a newly constructed salt water pond.



Partial Listing of Current E.S.P. Research Proposals

- 1) Geohydrological study of Southwest Florida - Steven Gorelick.
- 2) Man made pond and lake inventory of the Phillippi Creek drainage basin - Neil Sipe, Madeline Snow, Ruth Folit.
- 3) Culturing red tide organisms and chemical and biological assays of red tide - Martin Schwartz and Jeannie Floyd.
- 4) Arvida Corp. vs. S.O.B.A., a review of the legal and political aspects of an environmental issue - Tom Frichtenacht.
- 5) A handbook and guide to the marine environments of Sarasota Bay - Glenn Price.
- 6) Electric Cars and the mass transit program of Sarasota County - Larry Green
- 7) The development of an economical solar energy home for the Sarasota area - Ted Jacobson
- 8) The ecology and geography of marine fouling organisms and their utility as indicators of water quality in the Sarasota area - Ted DeWitt.
- 9) Sarasota County air pollution monitoring program - Raymond Gasser.

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